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APPLICATION NO	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09-888,749	06-25/2001	James N. Rockwell	3046A	9773

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Milliken & Company
P.O. Box 1927
Spartanburg, SC 29304

EXAMINER

JUSKA, CHERYL ANN

ART UNIT PAPER NUMBER

1771

DATE MAILED: 07/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/888,749

Applicant(s)

ROCKWELL ET AL.

Examiner

Cheryl Juska

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 33-40 is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 04-04-02 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention
2. Claims 10 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claim 10 is indefinite for it is unclear if the multiple fiber material in the form of a woven, needlepunched, tufted, or bonded fabric is air entangled or if just some of the yarns which make up said fabrics are air entangled. If the latter is the case, it is unclear which of the yarns are entangled. Are the ends of standard carpet yarn, the ends of monofilament yarns, or both ends together air entangled? In the tufted fabric, are the fibers of the primary backing also air entangled?
4. Claim 13 is indefinite because it is unclear if 30-60 describes the actual number of the monofilaments or the percentage thereof. For the purposes of examination, the claim is interpreted as the latter case.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Applicant claims a multiple fiber material comprising different ends of yarn, in particular tufted ends, with one end being made from standard carpet denier yarns ranging from 10-30 denier per filament (dpf) and total denier of 600-5000 denier and the other end of yarn made from heavy monofilament fibers having a dpf of 100-500 and a total denier of 300-5000 per yarn bundle. The fibers may be made of synthetic fibers, such as nylon, polyester, polypropylene, or natural fibers, such as cotton, cotton blend, or wool.

The material serves as a jet dyeable dual fiber fabric, wherein the dual fibers the carpet yarn and monofilament yarn. The material also provides for a method of dyeing a fabric base that contains monofilaments and a method of exposing monofilaments to dye for a sufficient time for said monofilament to capture said dye in its dyesites. The material is jet dyed by direct jet, airjet, bubble jet, or ink jet. Also, the material is air entangled and is a woven, needlepunched, tufted, or bonded fabric. In one embodiment, applicant claims a multiple fiber material comprising a nonwoven material which contains a carpet yarn and a monofilament yarn.

Applicant also claims a method for providing a system for the removal of dirt from pedestrian footwear at and around a building entryway, wherein said method comprises placement of a combination of three floor mats, A, B, and C, of particular constructions, wherein A is placed inside the entryway, mat C is placed outside the entryway, and mat B is placed either inside or outside the building entryway. In one embodiment, the building entryway has an air-lock vestibule configuration and mat B is placed within said vestibule.

7. Claims 1-9 and 32 are rejected under 35 USC 102(b) as being anticipated by WO 95/30040 issued to Combs et al.

Combs discloses a tufted floor mat having yarn tufts of fine and coarse fibers twisted together (abstract). The coarse fibers have a denier of 100-2000 dpf, preferably 300-600 dpf, while the fine fibers have a denier of 15-100 dpf, preferably 20-24 dpf (page 3, lines 6-11 and page 10, lines 14-22). One coarse fiber (i.e., monofilament) is twisted with a plurality of fine fibers to form a single-ply yarn that is then tufted into a primary backing (page 10, lines 9-12 and 23-24). The coarse fiber is preferably nylon or polyester, but natural fibers may also be employed (page 10, lines 10-11 and page 13, lines 22-24). Thus, claims 1-4 and 32 are anticipated by Combs.

8. With respect to claims 5-9, it is asserted that these limitations merely describe intended use and/or method limitations which do not materially effect the final product structure in a manipulative sense. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Additionally, the presence of process limitations on product claims, in which the product does not otherwise patentably distinguish over prior art, cannot impart patentability to the product. *In re Stephens*, 145 USPQ 656. Thus, claims 5-9 are also anticipated.

9. Claims 1-9 and 12-32 are rejected under 35 USC 102(b) as being anticipated by EP 933 059 issued to Nord et al.

Nord discloses the invention of claims 1-9 and 12-32. Specifically, Nord teaches a combination of three floor mats, A, B, and C, for a building entryway, wherein mat A comprises

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10-20% coarse denier monofilament yarns, mat B comprises 30-60% coarse monofilaments, and mat C comprises 100% coarse monofilaments (abstract). Mats A and B also contain fine fiber carpet yarns having a dpf of 1-50 (abstract and col. 5, lines 49-54). The coarse monofilaments have a dpf of 100-2000 (col. 5, lines 45-49). Said coarse monofilaments may be polypropylene, nylon, or polyester, while the fine carpet fibers may be nylon, rayon, wool, polyester, cotton, or polypropylene (col. 5, line 55-col. 6, line 17). The floor mats may be in the form of broadloom carpet or carpet tiles and may be decorated by known means, such as jet-dyeing (col. 4, lines 47-col. 5, line 21). Mats B and C have a backing of vinyl, rubber, or latex, while mat A has a backing of rubber, polyvinyl chloride, vinyl, or urethane (claim 1, col. 8, lines 1-28). Mat A is placed inside a building entryway, while mat B is placed either inside or outside said entryway, and mat C is placed outside said entryway (claim 1). Nord also discloses a building entryway having an airlock vestibule (claim 11). Thus, claims 1-9 and 12-32 are anticipated by the Nord reference.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 11 is rejected under 35 USC 103(a) as being unpatentable over the cited Combs or Nord reference.

Although Combs and Nord do not explicitly teach a nonwoven material comprising the coarse monofilament and the fine carpet yarn, tufted nonwoven mats or other nonwoven pile mats are well known in the art. Applicant is hereby given Official Notice of this fact. Thus, it would have been obvious for one of ordinary skill in the art to employ a nonwoven tufted or pile mat as a mat of the Combs or Nord invention. Motivation to do so would be the ease and low cost of manufacture of a nonwoven mat. Therefore, claim 11 is rejected.

12. Claims 12-31 are rejected under 35 USC 103(a) as being unpatentable over the figure on page 80 of Beigel et al., *Carpets and Flooring for Your Home*, in view of US 2,599,049 issued to Dollinger, and in further view of US 4,045,605 issued to Breens et al., US 4,711,191 issued to Schwartz, US 5,055,333 issued to Heine et al., and the cited Combs patent.

Beigel shows a drawing of a combination of three floor mats placed in succession through a building entryway. Specifically, the Beigel figure show a first outdoor mat, a second mat in a building airlock vestibule, and a third indoor mat. Dollinger teaches a series of three mats, wherein the mats progress in decreasing order of tuft coarseness from the exterior to the interior of a building (col. 2, lines 9-24). Said progression is employed to sequentially clean the shoes of persons passing into said building. Dollinger and Beigel are silent, however, with respect to the structure of the three specific mats. Thus, one of ordinary skill would have to look to the prior art to determine suitable mat constructions.

Applicant's three individual floor mats are well known in the art. For example, Schwartz discloses a heavy denier monofilament tufted carpet useful as a floor mat (col. 1, lines 5-7 and lines 59-65). The denier of said monofilaments range from 50-1000 (col. 2, lines 54-60), wherein said monofilament is preferably of polypropylene (col. 3, lines 19-22). Additionally,

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Heine teaches a floor mat comprised of a mixture of tufts of coarse denier yarns and tufts of fine denier yarns (abstract). The coarse denier yarns range from 150 to 5000 denier per filament, while the fine denier yarns range from 15 to 50 denier per filament (col. 3, lines 3-5). The ratio of fine yarns to coarse yarns is 1:3 to 3:1 (col. 3, lines 5-7). Hence, Heine teaches the limitations of applicant's floor mats A and B. Furthermore, Breens teaches a mat for scraping shoes which has a carpet-like appearance, wherein said mat is comprised of 2-25% of coarse filaments (col. 1, lines 4-18). The coarse filaments have a denier ranging from 30 to 300 tex (270 to 2700 denier) (col. 1, lines 25-28). Also, it is asserted that the presently claimed backing materials are conventional in the art of floor mats (see Heine, col. 5, lines 45-56). Furthermore, as noted above, Combs teaches the limitations of applicant's mat C.

It can be seen that the individual claimed floor mats are not novel to the art. Applicant's placement of the combination of said mats in a specific order in a specific environment appears to be the novelty of said invention. However, as evidenced by the cited Dollinger reference, the combination of three mats progressing in decreasing order of (i.e., specific order) coarseness is not novel. Additionally, the placement of mats with respect to an external environment is not novel either. Beigel clearly shows three mats in relation to a building entryway as claimed by the applicant. Therefore, it is held that claims 12-31 are rejected as being obvious over the cited prior art since it would have been obvious to one of ordinary skill to orient well-known floor mats, such as those disclosed by Schwartz, Heine, Breens, and Combs in a specific order of coarseness as taught by Dollinger, and in a specific building environment as taught by Beigel. Motivation to do so would be to decrease the amount of dirt and debris tracked into the building by progressively cleaning the shoes of passersby as they enter said building.

Allowable Subject Matter

13. Claims 33-40 are allowed. The prior art does not teach or fairly suggest a dual fiber base made by airjet texturing the claimed coarse monofilament yarns, then air entangling said textured monofilaments with the claimed fine carpet yarns to form one yarn end that is further air entangled with the claimed second yarn end, and subsequently tufting the two yarn ends as recited in claims 33-36. Additionally, the prior art does not teach the claimed method of making a dual fiber mat material by (a) texturing together 2-30 monofilaments by either airjet or mechanical texturing process and (b) air entangling the textured monofilaments with one end of a conventional carpet yarn, as recited in claims 37. The prior art also does not teach mats made of the dual fiber material made by the process of claim 37, as recited in claims 38-40.

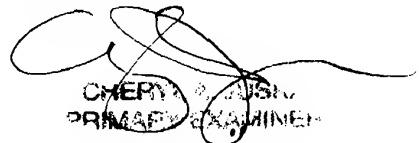
Conclusion

14. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Cheryl Juska whose telephone number is 703-305-4472. The Examiner can normally be reached on Monday-Friday 10am-6pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

cj
June 28, 2003


CHERYL JUSKA
PRIMARY EXAMINER